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technique approved in advance by the Administrator. The DF will be calculated to be the difference between the full life mileage evaporative level minus the stabilized mileage (e.g., 4000mile) evaporative level from the regression analysis. The DF and the full and stabilized mileage emission levels shall be rounded to two decimal places of accuracy in accordance with the Rounding-Off Method specified ASTM E29-93a, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications (incorporated by reference, see §86.1(b)(1). Calculated DF values of less than zero shall be changed to zero for the purposes of this paragraph.

- (d) Emission component durability. The manufacturer shall use good engineering judgment to determine that all emission-related components are designed to operate properly for the full useful life of the vehicles in actual use.
- (e) *In-use verification*. The durability program must meet the requirements of §86.1845–01.
- (f) Information obtained under §§ 86.1845–01, 86.1846–01, 86.1847–01 or from other sources shall be used by the manufacturer in developing new durability processes and/or updating existing durability processes using good engineering judgment.

 $[64\ {\rm FR}\ 23925,\ {\rm May}\ 4,\ 1999,\ {\rm as\ amended}\ {\rm at}\ 65\ {\rm FR}\ 6863,\ {\rm Feb}.\ 10,\ 2000;\ 65\ {\rm FR}\ 59974,\ {\rm Oct.}\ 6,\ 2000]$ 

## § 86.1824-07 Durability demonstration procedures for evaporative emissions.

§86.1824–07 includes text that specifies requirements that differ from those specified in §86.1824–01. Where a paragraph in §86.1824–01 is identical and applicable to §86.1824–07, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.1824–01." This section applies to gasoline, methanol-, natural gas- and liquefied petroleum gas-fueled LDV/Ts, MDPVs, and HDVs.

(a) through (f) [Reserved]. For guidance see §86.1824-01.

[66 FR 5192, Jan. 18, 2001]

## § 86.1824-08 Durability demonstration procedures for evaporative emissions.

This section describes durability demonstration procedures for evaporative emissions. Eligible small-volume manufacturers or small-volume test groups may optionally meet the requirements of §§ 86.1826 and 86.1838 instead of the requirements of paragraphs (a) through (j) of this section. A separate durability demonstration is required for each evaporative/refueling family.

- (a) Durability program objective. The durability program must predict an expected in-use emission deterioration rate and emission level that effectively represents a significant majority of the distribution of emission levels and deterioration in actual use over the full useful life of candidate in-use vehicles of each vehicle design which uses the durability program. This requirement applies for all SHED-based measurements except the bleed emission test. The standard for bleed emissions applies for the full useful life, but manufacturers do not need to establish deterioration factors for bleed emissions. The requirements of this section do not apply for spitback or leak standards.
- (b) Required durability demonstration. Manufacturers must conduct a durability demonstration which satisfies the provisions of either paragraph (c), (d), or (e) of this section.
- (c) Whole vehicle evaporative durability demonstration. (1) Mileage accumulation must be conducted using the SRC or any road cycle approved under the provisions of §86.1823(e)(1).
- (2) Mileage accumulation must be conducted for either:
- (i) The applicable full useful life mileage period specified in §86.1805, or
- (ii) At least 75 percent of the full useful life mileage. In which case, the manufacturer must calculate a df calculated according to the procedures of paragraph (f)(1)(ii) of this section, except that the DF must be based upon a line projected to the full-useful life mileage using the upper 80 percent statistical confidence limit calculated from the emission data.
- (3) The manufacturer must conduct at least one evaporative emission test at each of the five different mileage